

Teacher Performance Pay Programs

Program description:

Teacher performance pay programs distribute bonuses to individual teachers and sometimes to schoolwide staff. Performance is usually measured as value-added student test scores alone or in combination with some other assessment (such as principal evaluations). These evaluations examine the impact on student test scores from short-term, pilot performance pay programs.

Typical age of primary program participant: 10

Typical age of secondary program participant: N/A

Meta-Analysis of Program Effects

Outcomes Measured	Primary or Secondary Participant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
						First time ES is estimated			Second time ES is estimated		
			ES	SE	p-value	ES	SE	Age	ES	SE	Age
Test scores	P	21	0.00*	0.01	0.69	0.00	0.01	11	0.00	0.01	17

*actual ES = .0047 before rounding

Benefit-Cost Summary

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2.	Program Benefits					Costs	Summary Statistics			
	Partici- pants	Tax- pay- ers	Other	Other Indirect	Total Benefits		Benefit to Cost Ratio	Return on Invest- ment	Benefits Minus Costs	Probability of a positive net present value
	\$189	\$69	\$0	\$37	\$295	-\$34	\$8.62	12%	\$261	63%

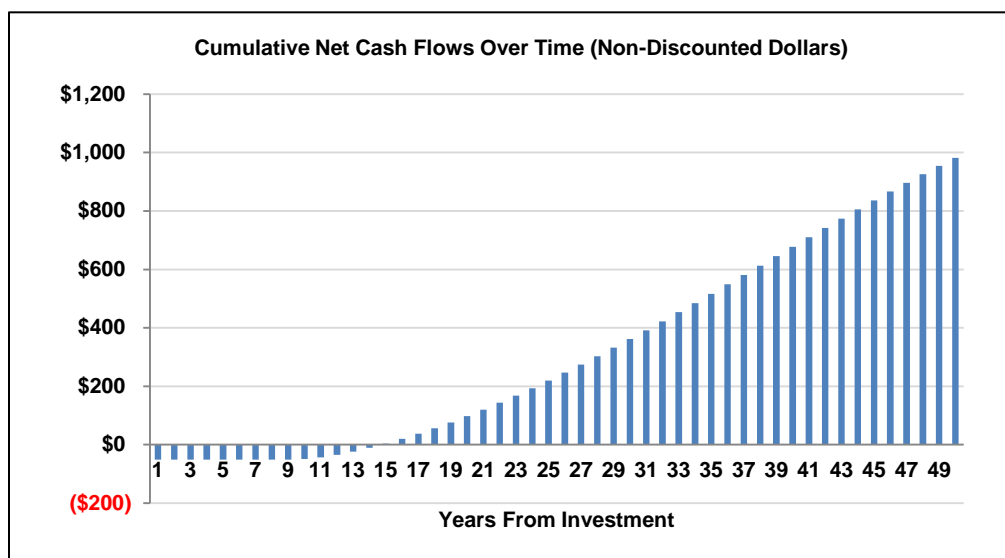
Detailed Monetary Benefit Estimates

Source of Benefits	Benefits to:				
	Partici-pants	Tax-payers	Other	Other In-direct	Total Benefits
From Primary Participant					
Earnings via test scores	\$189	\$69	\$0	\$37	\$295

Detailed Cost Estimates

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2.	Program Costs			Comparison Costs			Summary Statistics	
	Annual Cost	Program Duration	Year Dollars	Annual Cost	Program Duration	Year Dollars	Present Value of Net Program Costs (in 2011 dollars)	Uncertainty (+ or - %)
	\$33	1	2010	\$0	0	2010	\$34	20%

Source: The performance bonuses in the evaluated programs ranged from a maximum of \$1,500 to a maximum of \$15,000; in over half of the programs, the maximum award was \$3,000. For this estimate, we assume an average bonus of approximately \$2,500 per teacher (including administrative costs), spread across 75 students.



Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	1.00
2- Well-implemented comparison group design, often with many statistical controls.	1.00
3- Well-done observational study with many statistical controls (e.g., instrumental variables).	1.00
4- Random assignment, with some implementation issues.	1.00
5- Well-done random assignment study.	1.00
Program developer = researcher	0.5
Unusual (not "real-world") setting	0.5
Weak measurement used	0.5

Studies Used in the Meta-Analysis

- Dee, T. S., & Keys, B. J. (2004). Does merit pay reward good teachers? Evidence from a randomized experiment. *Journal of Policy Analysis and Management*, 23(3), 471-488.
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